

In the Claims

Cancel, without prejudice, claims 1-10 and 16-20.

Claims 1-10 (Canceled)

11. (Currently Amended) A photocatalyst reaction apparatus provided with a photocatalyst module defined in claim 4, which module comprises a substrate, a photocatalyst, and a protective layer containing lithium silicate provided between the substrate and the photocatalyst.

12. (Currently Amended) A photocatalyst reaction apparatus according to claim 11, which apparatus comprises a water tank provided with a said photocatalyst module, defined in claim 1, water introducing means, water discharging means, and means for radiating ultraviolet rays.

01 13. (Original) A photocatalyst reaction apparatus comprising a water tank on at least a part of the inner wall surface of which tank a photocatalyst is provided through a protective layer containing lithium silicate, the water tank further having means for introducing water to be treated, means for discharging the treated water, and means for radiating ultraviolet rays each provided at or in the water tank.


14. (Original) The photocatalyst reaction apparatus according to claim 13 wherein said apparatus comprises at least two water tanks connected in series, the means for radiating ultraviolet rays provided in a first water tank is means for radiating ultraviolet rays of a medium wavelength of 170 to 160 nm, and the means for radiating ultraviolet rays provided in a second water tank is means for radiating ultraviolet rays of a long wavelength of 310 to 370 nm.

15. (Original) The photocatalyst reaction apparatus according to claim 14 wherein said apparatus further comprises a tank used for mixing ozone formed by radiating ultraviolet rays of a short wavelength of 183 to 184 nm to air with water to be treated and placed at a position preceding said first water tank in the order of treatments.

Please add new claims 21-25.

21. (New) The photocatalyst reaction apparatus according to claim 11, wherein said protective layer containing lithium silicate is a film obtained by applying a paint prepared from a vehicle containing 80 to 90% by weight of lithium silicate and 10 to 20% by weight of sodium silicate on the surface of said substrate.

22. (New) The photocatalyst reaction apparatus according to claim 21 wherein said vehicle further contains 0.1 to 10% by weight of a resin emulsion which is not gelatinized under an alkaline condition of a pH of 11 to 12.

 23. (New) The photocatalyst reaction apparatus according to claim 11 wherein said photocatalyst is titanium oxide.

24. (New) The photocatalyst reaction apparatus according to claim 11, wherein said photocatalyst is in a shape of a layer of particles.

25. (New) The photocatalyst reaction apparatus according to claim 13, wherein said photocatalyst is titanium oxide.
